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USWEST

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EX PARTE

April 21, 1998

Ms. Magalie Roman Salas, Secretary
Federal Communications Commission
1919 M Street, NW, Room 222, SC-1170
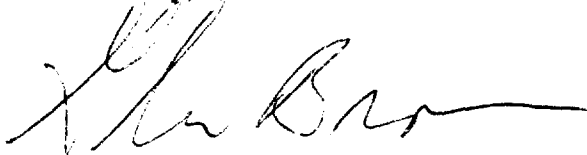Washington, DC 20554

RE: Dockets CC 96-45, 97-160

Dear Ms. Roman Salas:

Today, Kathleen Abernathy, Vice President,-Federal Regulatory and Glenn Brown, Executive Director-Public Policy, both of U S WEST, met with Paul Gallant, Legal Advisor to Commissioner Gloria Tristani, to discuss Universal Service issues. The attached charts were used during our discussion.

In accordance with Section 1.1206(a)(2) of the Commission's Rules, the original and four copies of this letter, are being filed with your office for inclusion in the public record for the above-mentioned proceedings. Acknowledgment of date of receipt of this transmittal is requested. A duplicate of this letter is provided for this purpose.

Please contact me if you have questions.

Sincerely,

Attachments

cc: Paul Gallant

UNIVERSAL SERVICE OVERVIEW

April 21, 1998

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UNIVERSAL SERVICE PROBLEM

- Goal of Low Basic Service Prices
- High Degree of Rate Averaging
- Two Sources of Historical Universal Service Subsidy

    1. Explicit   About $1B

    2. Implicit $5B - $19B

Toll/Access	⟶	Local
Business	⟶	Residence
Urban	⟶	Rural

- Telecom Act of 1996 Changed Everything

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IMPACTS OF 1996 ACT

- Prices Must Be <u>Just, Reasonable and Affordable</u>

- Implicit Support Must Be Replaced by <u>Explicit Support</u>
  - <u>Specific</u>
  - <u>Predictable</u>
  - <u>Sufficient</u>
- Customers in Rural and High-Cost Areas <u>Should Have Services (Including Access to Advanced Services) and Prices Comparable to Those in Urban Areas</u>
- Phased Implementation of New Explicit Support (Per FCC)
  - "Non-Rural" LECs   January 1, 1999
  - "Rural" LECs   2001 Through 2003
- Ability to raise basic service prices will be limited

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THE FCC's DECISION

- Issued May 8, 1997

- Schools and Libraries
  - $2.25B Fund
  - Funding Based on State and Interstate Revenues
  - Sliding Scale of Discounts

- Rural, Insular and High Cost Areas
  - Funding 75% States / 25% Federal
  - "Non-Rural" Telephone Companies
    - Support = Forward-Looking Cost - Benchmark
    - 14 Month Process to Select Proxy Cost Model
  - "Rural" Telephone Companies
    - Continue Present Mechanisms
    - Transition to Forward-Looking Mechanism Beginning in 2001

KEY ELEMENTS FOR UNIVERSAL SERVICE FUNDING

1. Structure of the Fund
   - National Fund
   - 25% Interstate / 75% Intrastate
   - Alternatives ??

2. Amount of Funding Required
   - The Proxy Cost Models

3. Targeting of Support
   - Statewide Averages
   - Wire Center Averages
   - Below the Wire Center

4. Removal of Implicit Support

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FUNDING STRUCTURE

- The FCC Decision Requires a 75/25 Split of Funding Between the State and Federal Jurisdictions

- 75/25 Will Threaten Affordability in Some States
  - Primary Drivers:
    - Number of High Cost Customers
    - Range of Costs
    - Number of Low Cost Customers to Spread Burden Over

Funding Alternatives

1. NATIONAL FUND

$$\text{National \%} = \frac{\text{National Funding Requirements}}{\text{State + Interstate Revenues}}$$
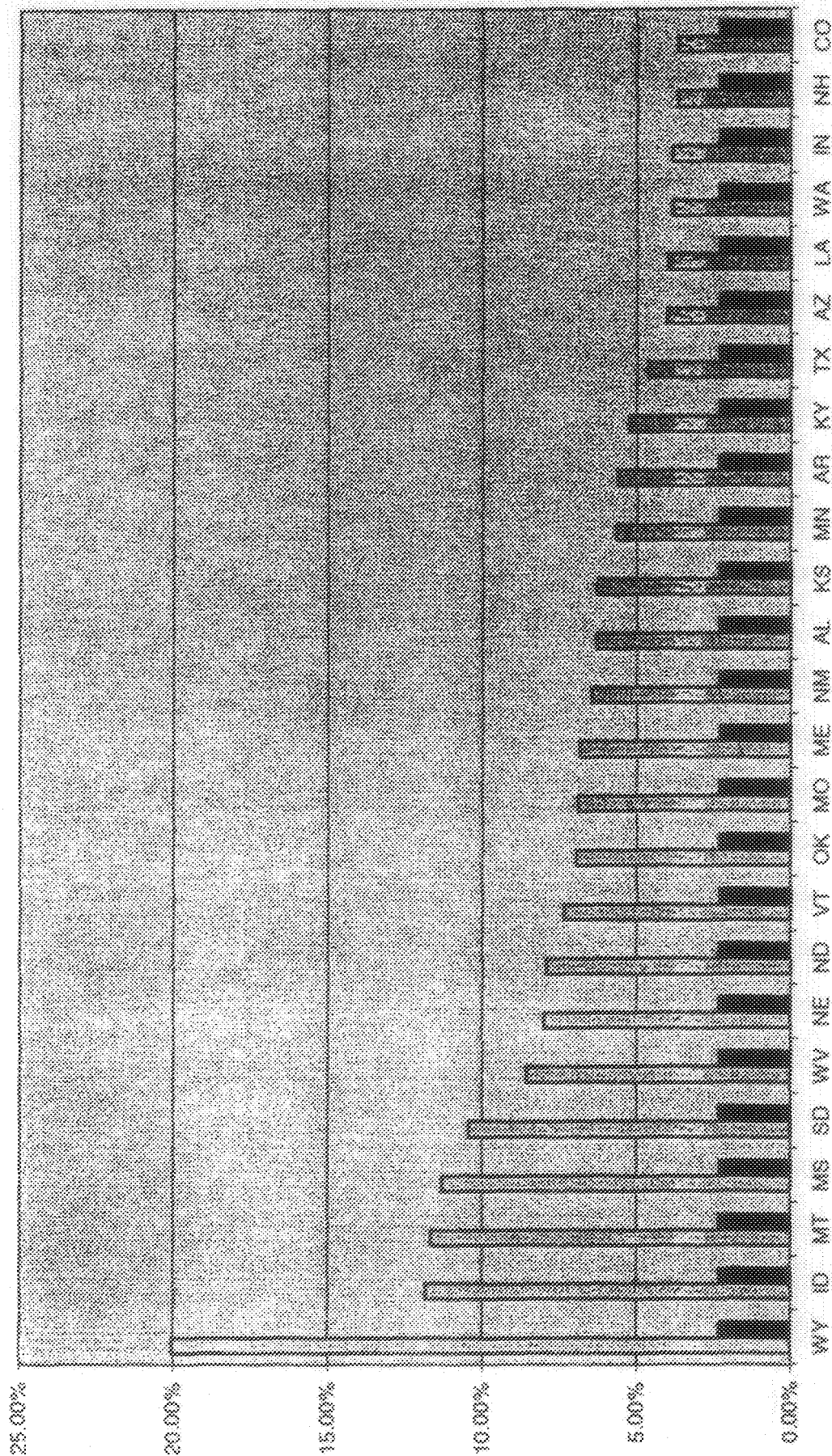
2. SEPARATE STATE AND INTERSTATE FUNDS

$$\text{State \%} = \frac{75\% \text{ Of State Funding Requirements}}{\text{State Revenues}}$$

$$\text{Interstate \%} = \frac{25\% \text{ Of National Funding Requirements}}{\text{Interstate Revenues}}$$
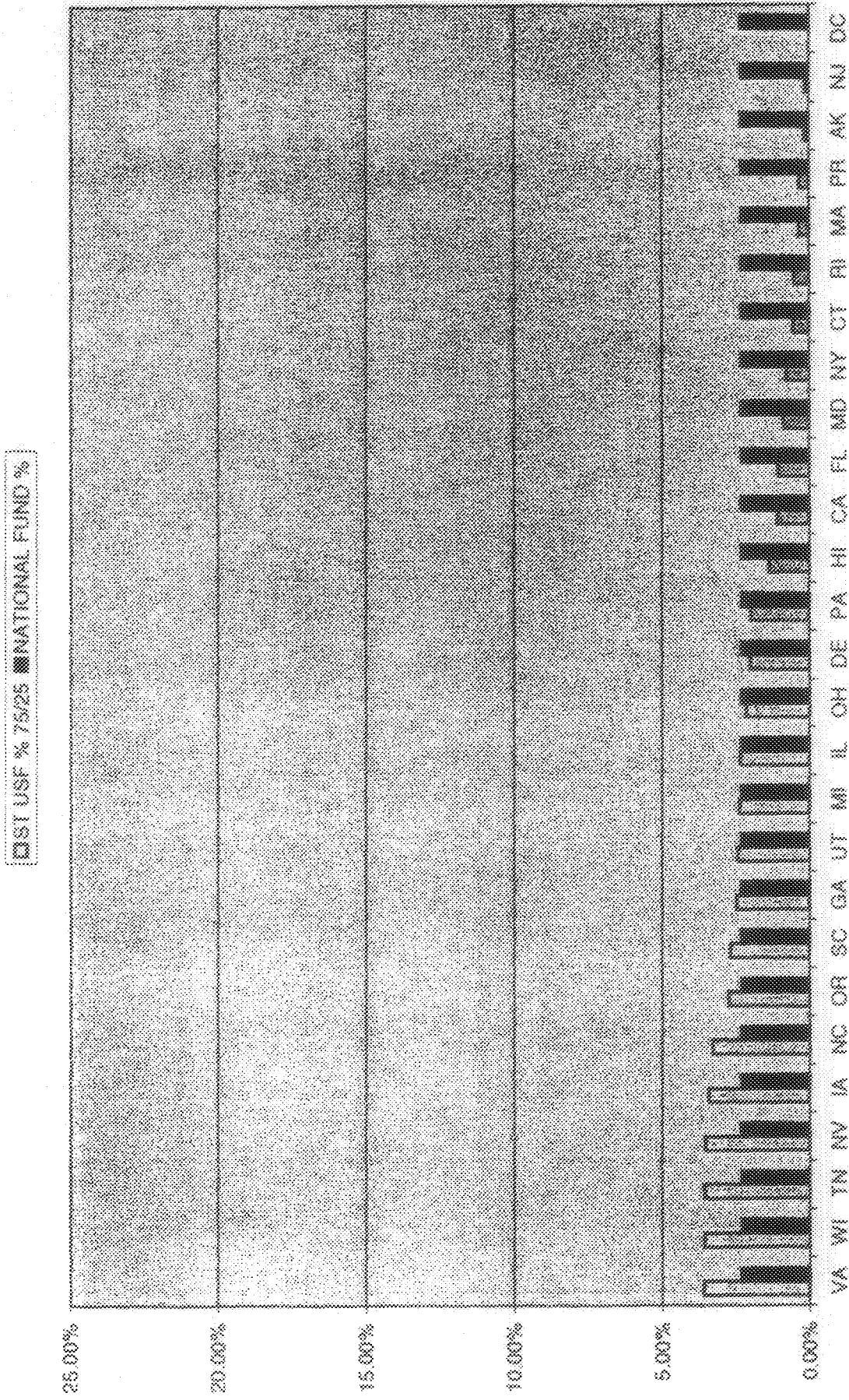
Non-Rural LECs "Common Inputs" (4.5B Fund)

ST USF % 75/25 NATIONAL FUND %

Note: This chart assumes a fund size of $4.5B derived from using FCC "common inputs" in the BCPM3 model. The actual fund size will be determined after completion of further proceedings to finalize model inputs.

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Non-Rural LECs FCC "Common Inputs ($4.5B Fund)

Legend: DIST USF % 75/25 NATIONAL FUND %

X-axis labels: VA WI TN NV IA NC OR SC GA UT MI IL OH DE PA HI CA FL MD NY CT RI MA PR AK NJ DC

Y-axis: 0.00%, 5.00%, 10.00%, 15.00%, 20.00%, 25.00%

Note: This chart assumes a fund size of $4.5B derived from using FCC "common inputs" in the BCPM1 model.
The actual fund size will be determined after completion of further proceedings to finalize model inputs.
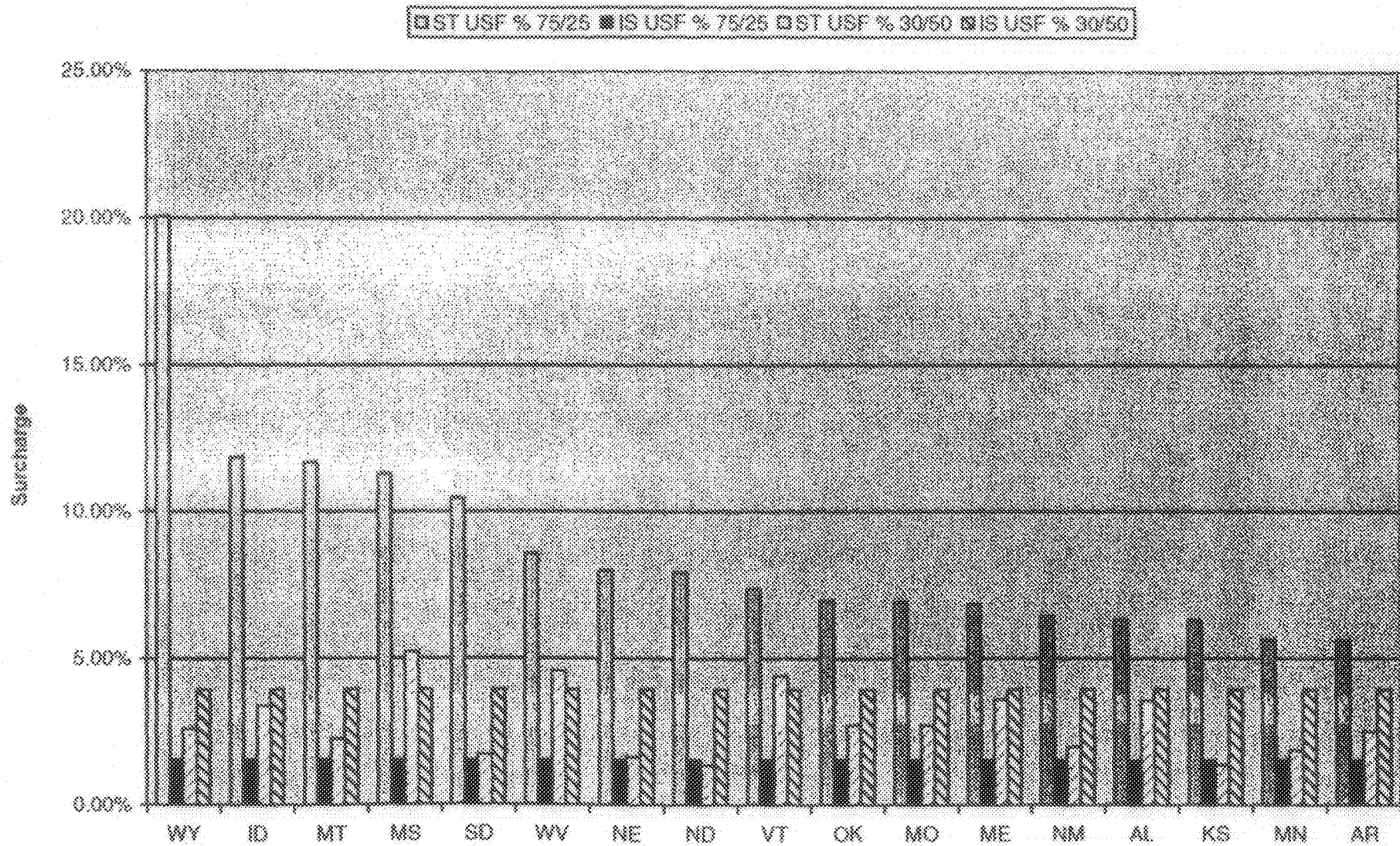
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Non-Rural LECs, Common Inputs (1 Of 3)

☐ ST USF % 75/25 ■ IS USF % 75/25 ☐ ST USF % 30/60 ▨ IS USF % 30/50

Note: This chart assumes a fund size of $4.5B derived from using FCC "common inputs" in the BCPM3 model. The actual fund size will be determined after completion of further proceedings to finalize model inputs.
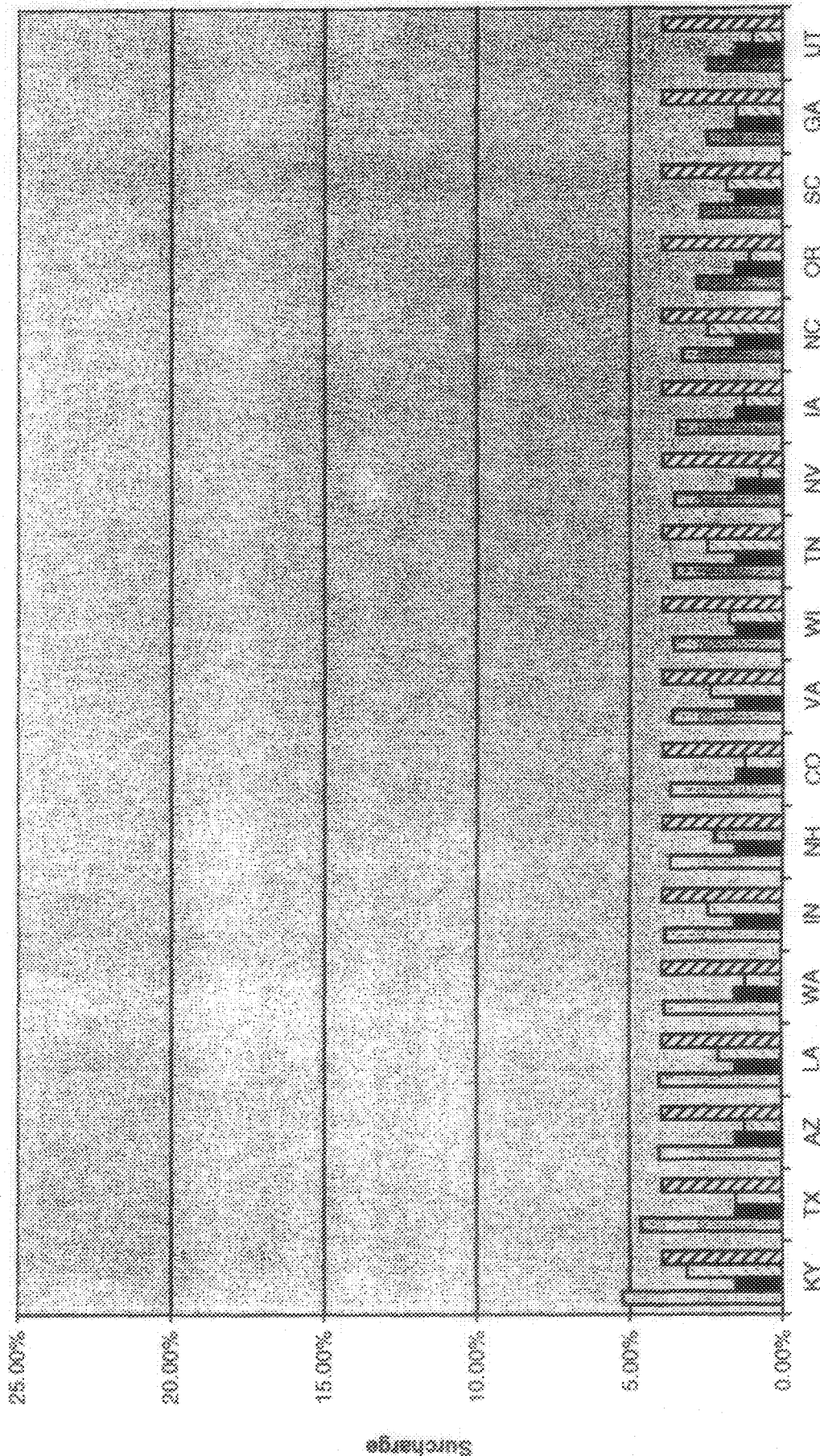
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Non- Rural LECs, Common Inputs (2 of 3)

Legend: □ ST USF % 75/25 ■ IS USF % 75/25 □ ST USF % 30/50 ▨ IS USF % 30/50

Note: This chart assumes a fund size of $4.5B derived from using FCC "common inputs" in the BCPM3 model.
The actual fund size will be determined after completion of further proceedings to finalize model inputs.
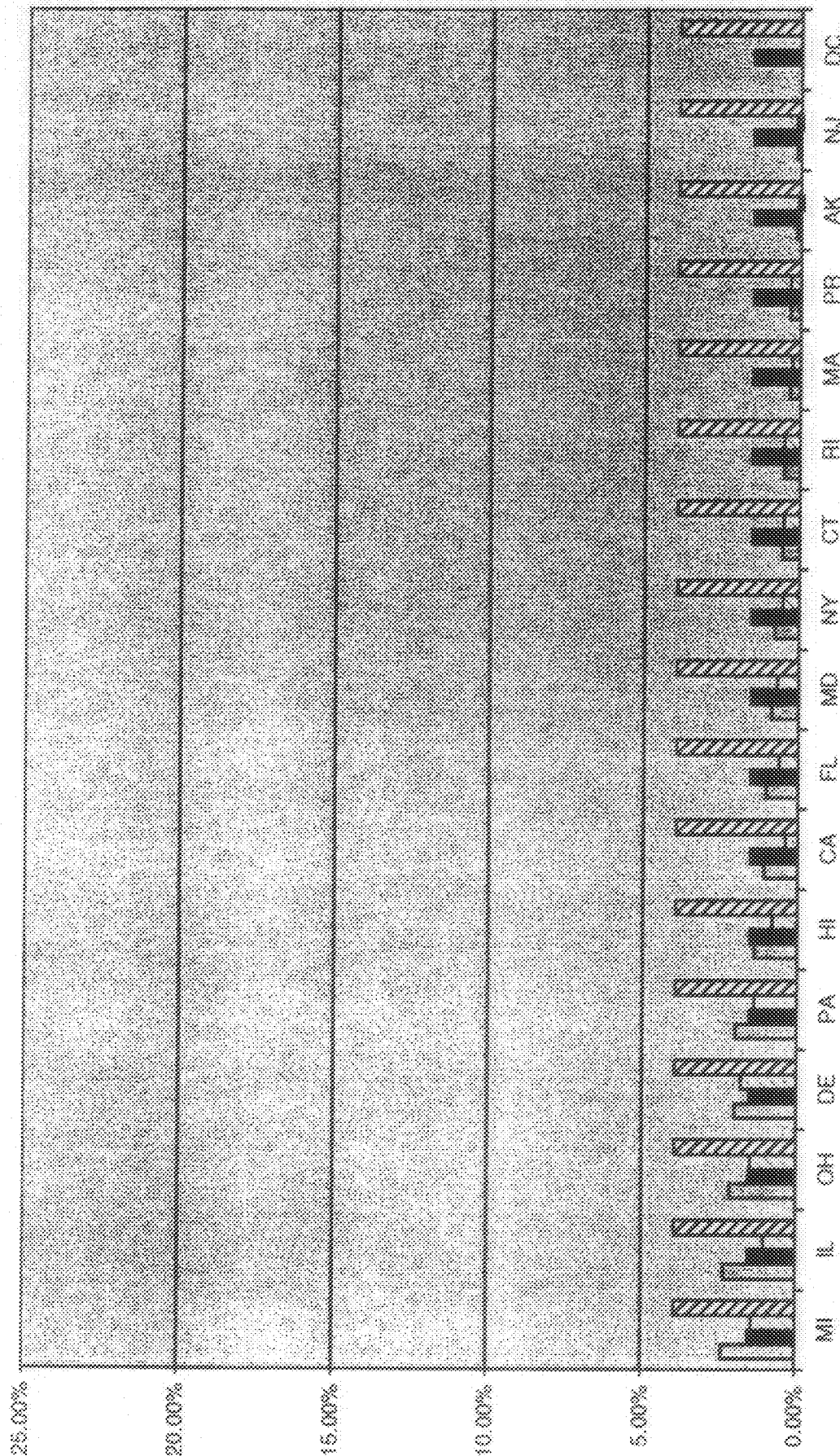
Non-Rural LECs, Common Inputs (0 of 3)

ST USF % 75/25 IS USF % 75/25 ST USF % 30/50 IS USF % 30/50

Note: This chart assumes a fund size of $4.5B derived from using FCC "common inputs" in the BCPM3 model. The actual fund size will be determined after completion of further proceedings to finalize model inputs.

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THE PROXY COST MODELS

- The Contenders:
  - HAI (formerly Hatfield) Model (AT&T and MCI)
  - Benchmark Cost Proxy Model (U S WEST, BellSouth and Sprint)

- The Issues:
  - Customer Location
  - Loop Design
  - Input Factors
    - Material Prices
    - Capital Cost Factors
  - Objectives of the Study
    - Universal Service Funding
    - Unbundled Network Elements (UNEs)

FCC PROXY CRITERIA

1. Technology must be least cost and not impede provision of advanced services.
2. All network functions must have an associated cost.
3. Only long-run forward-looking costs may be included.
4. Rate of return must be current FCC or State prescribed.
5. Depreciation rates must be within FCC-authorized range.
6. Must include the cost of serving all businesses and households.
7. Reasonable allocation of joint and common costs.
8. The model and all underlying data, formulae, computations and software must be available to all interested parties. All data must be verifiable, engineering assumptions reasonable, an outputs plausible.
9. Must be able to modify critical assumptions and engineering principles.
10. Must deaverage support to the wire center, and if possible, the CBG, CB or grid cell.

COMPARISON OF MODEL RUNS

TOTAL NON-
RURAL LECs FUND

BCPM3 w/Default Inputs	$8.9B
BCPM3 w/Common Inputs *	$4.5B
HAI 5.0 w/Common Inputs *	$4.7B
HAI 5.0 w/Default Inputs	$2.8B

* Common inputs were prescribed by FCC Staff to facilitate comparison of models. Neither model sponsor endorses these inputs as the correct basis for the determination of high-cost support.

COMPARISON OF COMMON INPUT RUNS

	Fund Size ($M) Wire Center		Fund Size ($M) Census Block Group		HAI as % of BCPM	
	HAI5.0	BCPM3	HAI5.0	BCPM3	WC	CBG
Ameritech	$121.7	$121.6	$184.5	$205.0	100%	90%
Bell Atlantic	$414.5	$298.1	$563.3	$426.4	139%	132%
Bell South	$472.8	$466.0	$749.8	$699.8	101%	107%
GTE	$746.5	$922.9	$896.8	$1,116.1	81%	80%
SBC	$417.2	$484.5	$628.6	$706.0	86%	89%
United	$267.6	$236.0	$350.1	$315.5	113%	111%
US WEST	$377.7	$471.6	$621.4	$663.7	80%	94%
Others	$330.1	$259.5	$415.6	$333.8	127%	125%
Total	$3,148.1	$3,260.2	$4,410.1	$4,466.3	97%	99%

* Common inputs were prescribed by FCC Staff to facilitate comparison of models. Neither model sponsor endorses these inputs as the correct basis for the determination of high-cost support.

DIFFERENCES ARE EVEN WIDER AT THE STUDY AREA LEVEL

	Monthly Cost			High Cost Funding		
	HAL 5.0a	BCPM3	DIFF	HAL 5.0a	BCPM3	DIFF
North Dakota	$28.61	$35.78	80%	$12.2M	$22.1M	55%
Montana	$31.32	$42.30	74%	$24.3M	$39.7M	61%
New York	$20.79	$21.74	98%	$84.1M	$58.6M	143%
Maryland	$22.80	$23.31	98%	$31.7M	$16.0M	199%

* Common inputs were prescribed by FCC Staff to facilitate comparison of models. Neither model sponsor endorses these inputs as the correct basis for the determination of high-cost support.

REASONS FOR DIFFERENCES

- USE OF GEOCODEDED DATA

  - HAI 5.0 USES GEOCODED DATA TO DEFINE "CLUSTERS" OF CUSTOMERS
  - ONCE BOUNDARIES OF CLUSTER ARE DEFINED, GEOCODED DATA IS DISCARDED
  - FOR NETWORK DESIGN, CUSTOMERS ARE ASSUMED TO BE UNIFORMLY DISTRIBUTED WITHIN THE CLUSTER, AND THE RT IS LOCATED AT THE CENTER OF THE CLUSTER

- ABILITY TO ACCURATELY GEOCODE CUSTOMERS

  - GEOCODING IS DONE FROM CUSTOMER ADDRESSES
  - GOOD "HIT RATE" IN URBAN AREAS, POOR IN RURAL
  - LOCATION "ASSUMED" FOR NON GEOCODED CUSTOMERS

REASONS FOR DIFFERENCES

- BCPM3 USES A SMALLER DESIGN AREA, AND ADDITIONAL DATA
    - BCPM3 USES SMALL "GRIDS"
    - BCPM3 USES GEOCODED ROAD DATA TO ASSIGN CUSTOMERS TO GRIDS, AND LOCATE CUSTOMERS WITHIN GRIDS
    - BCPM3 PRESERVES THIS CUSTOMERS LOCATION DATA THROUGHOUT THE NETWORK DESIGN PROCESS
- BCPM3 PROVIDES A MORE GRANULAR VIEW OF NETWORK DESIGN AND COSTS
- HAI USES A PROPRIETARY ALGORITHM TO LOCATE CUSTOMERS AND DESIGN PLANT WHICH SYSTEMATICALLY UNDER-PROVIDES DISTRIBUTION PLANT

PUTTING IT IN PERSPECTIVE

1. "FORWARD-LOOKING" INVOLVES CERTAIN CONCESSIONS TO REALITY:
   - Networks aren't built with one "efficient" build-out
   - Planners do not have perfect knowledge
   - Today's "forward-looking" is tomorrow's "embedded"

2. THE HAI MODEL ASSUMES THE MOST OPTIMISTIC CASE IN EVERY CASE:
   - Perfect structure sharing
   - Eclectic mix of state-of-the-art and antiquated technologies, running flat-out
   - The HAI network exists in the mind of the economist, not the world of the engineer

PUBLIC POLICY PERSPECTIVES

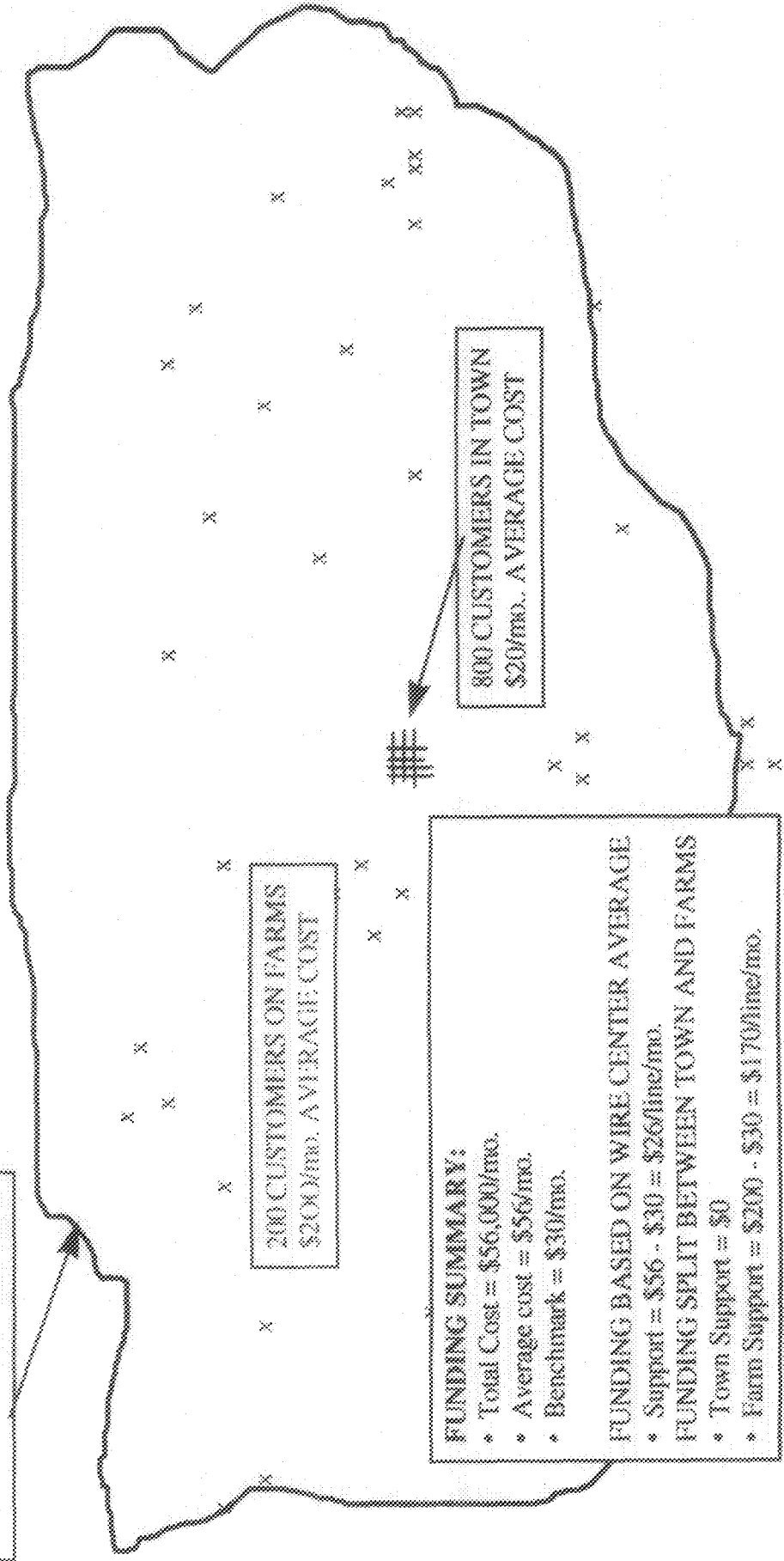| UNE PRICING	UNIVERSAL SERVICE
MAJOR OBJECTIVES	**MAJOR OBJECTIVES**
• Encourage local market entry	• "Specific, Predictable and Sufficient" support
• Price at cost (TELRIC)	• Affordable rural service
• Keep the costs low	• Access to advanced services
IF COSTS ARE UNDERESTIMATED	**IF COSTS ARE UNDERESTIMATED**
• More competitors enter market (through resale)	• Providers will not construct facilities to serve high-cost rural areas
• Adverse financial impact to the incumbent	• Rural rates will rise
	• Rural customers will not have access to advanced services
IF COSTS ARE OVERESTIMATED	**IF COSTS ARE OVERESTIMATED**
• Local entry discouraged	• ILECs and others will overpay to fund
	• "Gaming" of the system

UNE pricing may involve incentives to err on the low side. However underestimation of costs for universal service support can have severe public policy consequences. The HAI model was developed primarily for UNE pricing, and tends to understate costs. The BCPM attempts to neither understate nor overstate forward-looking costs.

SUPPORT MUST BE TARGETED BELOW THE WIRE CENTER

WIRE CENTER BOUNDARY

800 CUSTOMERS IN TOWN
$20/mo. AVERAGE COST

200 CUSTOMERS ON FARMS
$200/mo. AVERAGE COST

FUNDING SUMMARY:
- Total Cost = $56,000/mo.
- Average cost = $56/mo.
- Benchmark = $30/mo.

FUNDING BASED ON WIRE CENTER AVERAGE
- Support = $56 - $30 = $26/line/mo.

FUNDING SPLIT BETWEEN TOWN AND FARMS
- Town Support = $0
- Farm Support = $200 - $30 = $170/line/mo.

RATE REBALANCING

- Removal of implicit support presents a once-in-a-career opportunity to rebalance rates.

- The greater the rate rebalancing freedom granted by regulators, the smaller will be the size of the required explicit support fund.

- Rate rebalancing should benefit the evolution of competition.